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## RPC-SDHCAL status

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The CALICE technological RPC-based SDHCAL prototype that fulfils all the requirements of compactness, hermeticity and power budget of the future lepton accelerator experiments, has been extensively tested and has provided excellent results in terms of the energy resolution and shower separation.

New phase of R&D to validate completely the SDHCAL option for the International Linear Detector (ILD) project of the ILC and also the Circular Electron Positron Collider (CEPC) has started with the conception and the realization of new prototypes. One of the new prototypes is intended to host few but large active layers of the future SDHCAL. The new active layers, made of GRPC with sizes larger than 2 m<sup>2</sup> will be equipped with a new version of the electronic readout fulfilling the requirements of the future ILD detector. The new GRPC are conceived to improve the homogeneity with a new gas distribution scheme. Finally, the mechanical structure will use the electron beam welding.

The second new prototype propose to exploit the excellent time resolution provided by RPC detectors in order to better build the hadronic showers with the aim to better separate them and also to single out the contribution of delayed neutrons.

The progress realized on the two prototypes will be presented and the future steps will be discussed.

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